



Goods Movement & Ports: The Air Quality Challenge

**Public Meeting on Goods Movement & Ports
January 27, 2005
Los Angeles, CA**

Overview

- ◆ Need for Action
- ◆ Goods Movement Emissions
- ◆ California's Strategy

Need for Action



Future Trends

- ◆ Dramatic increase in trade
- ◆ More emissions from entire goods movement system
- ◆ Concentrated near population centers
- ◆ Some sources still poorly controlled

Public Health Is Imperative

- ◆ Will prevent attainment if not addressed
- ◆ Localized exposure and risk a significant concern

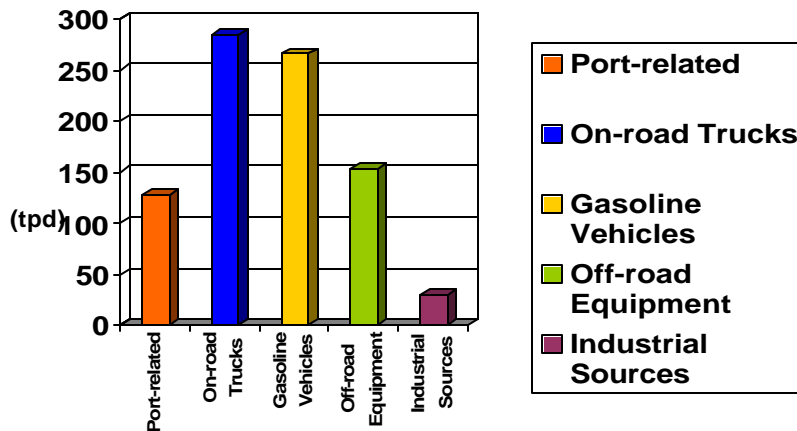


Emissions from Goods Movement

- ◆ On-road heavy-duty diesel trucks
- ◆ Land-based cargo handling and support equipment
- ◆ Ships
- ◆ Locomotives

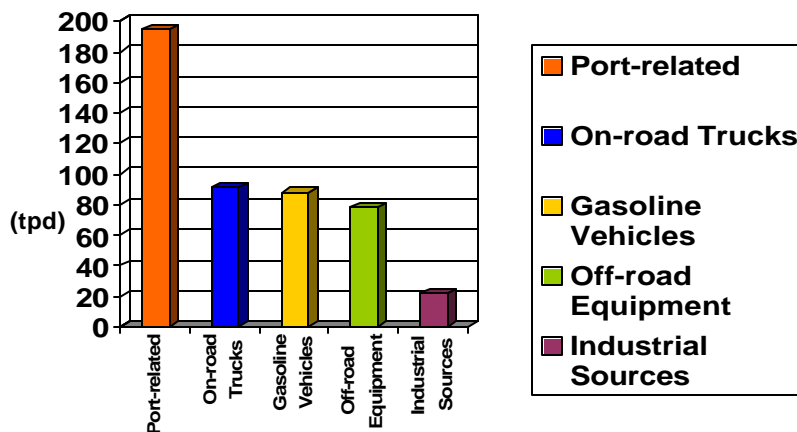


2005 NOx Emissions In the South Coast Air Basin from a Variety of Sources



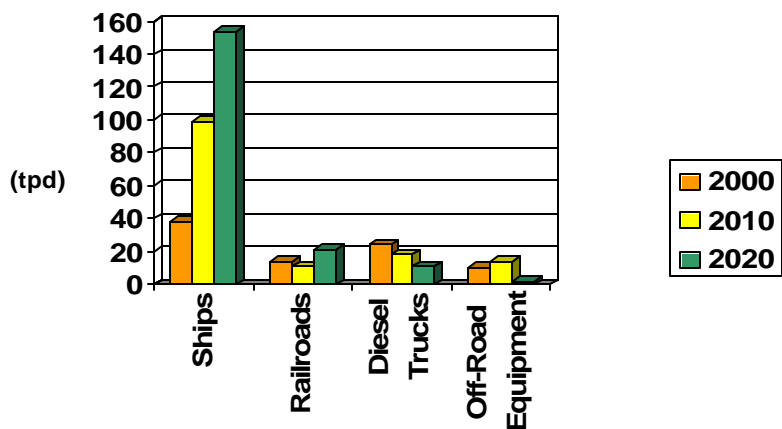
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2020 NOx Emissions In the South Coast Air Basin from a Variety of Sources



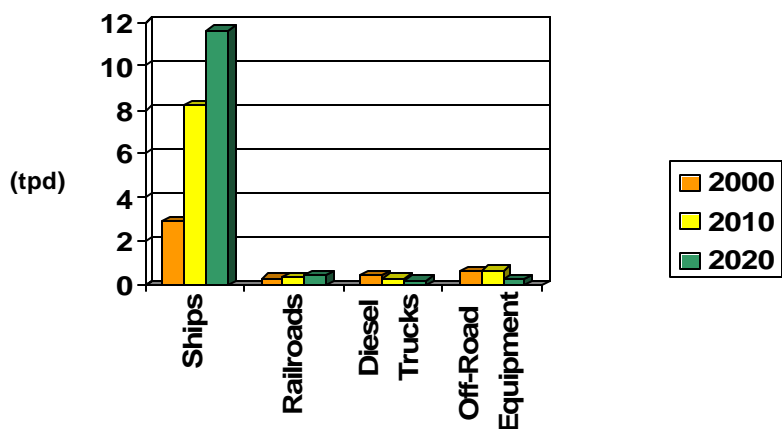
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Emission Trends for Various Port-related Sources In the South Coast Air Basin (NOx)



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Emission Trends for Various Port-related Sources In the South Coast Air Basin (PM)



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California's Framework for Air Quality Improvement

- ◆ Governor's Commitment to Reduce Port Related Emissions
- ◆ Diesel Risk Reduction Plan
 - 85% reduction in diesel PM by 2020
- ◆ State Implementation Plan
 - Blueprint for meeting federal air quality standards
- ◆ Governor's Environmental Action Plan
 - 50% reduction in emissions by 2010
- ◆ Environmental Justice and Community Health

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Key Strategies: **Ships**

- ◆ Cleaner Fuels
- ◆ More Efficient Ships
- ◆ Cleaner Engines
- ◆ Shore Power



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Key Strategies: **On-Road Port Trucks**

- ◆ Fleet Modernization
- ◆ Smoke and Idling Enforcement
- ◆ PM Retrofits



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Key Strategies: **Cargo Handling Equipment**

- ◆ Accelerate Turnover to Cleaner Engines
- ◆ In-Use Retrofits
- ◆ Alternative Fuels



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Key Strategies: **Locomotives**

- ◆ New Engine Standards
- ◆ Fleet Modernization
- ◆ Idling Reduction



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Key Strategies: **Commercial Harbor Craft**

- ◆ New Engine Standards
- ◆ Accelerate Turnover to Cleaner Engines
- ◆ Cleaner Fuels
- ◆ In-Use Retrofits



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Implementation Approaches for Key Strategies

- ◆ Regulation
- ◆ Cooperative Agreements
- ◆ Incentives
- ◆ Improved Efficiencies
- ◆ Fees

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Conclusion

- ◆ Goods movement impacts air quality
- ◆ Efforts are underway to reduce emissions
- ◆ Comprehensive strategy to keep emissions in check
- ◆ Need regional, national, and international cooperation

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